UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/887,549	06/25/2001	Irit Loy	LOY=4	5844

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EXAMINER
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ART UNIT	PAPER NUMBER
2161	

DATE MAILED: 12/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *16 July 2004*.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
    closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,3 and 5-13* is/are pending in the application.

   4a) Of the above claim(s) *2,4 and 14-39* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,3 and 5-13* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *25 June 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

    1.☐ Certified copies of the priority documents have been received.

    2.☐ Certified copies of the priority documents have been received in Application No. _____.

    3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
        application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date *7/16/2004*.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

Status of Claims

Claims 1, 3 and 5-13 are pending. Claims 1, 3 and 5-13 are rejected. Claims 2 and 4 are

canceled. Claims 14-39 are withdrawn.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1, 3 and 5-13 are rejected under 35 U.S.C. 112, second paragraph, as being

indefinite for failing to particularly point out and distinctly claim the subject matter which

applicant regards as the invention.

Claim 1 recites "**using** (emphasis added) a data management application programming

interface (DMAPI)," but, since the claim does not set forth any steps involved in the

method/process, it is unclear what method/process applicant is intending to encompass. A claim

is indefinite where it merely recites a use without any active, positive steps delimiting how this

use is actually practiced. For purposes of this office action, examiner will give above claim

language its broadest reasonable interpretation.

Claim Rejections - 35 USC § 101

Claims 1, 3 and 5-13 are rejected under 35 U.S.C. 101 because the claimed recitation of a

use, without setting forth any steps involved in the process, results in an improper definition of a

process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for

example *Ex parte Dunki*, 153 USPQ 678 (Bd.App. 1967) and *Clinical Products, Ltd.* v. *Brenner*,

255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966).

The invention should be tangibly embodied in a computer program residing on a

computer-readable medium. The computer program should comprise instructions which when

read and executed by the computer causes the computer to perform the steps of the present

invention. In instant application, no method steps are claimed for creating a session by means of

a data management application programming interface (DMAPI).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on
sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 3, 5-11 and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by US

Pat No 5,893,086 issued to Schmuck et al (hereafter Schmuck), as best examiner is able to

ascertain.

Claim 1:

Schmuck discloses:

creating a session of a data management (DM) application on a session node selected from

among the nodes in the cluster using a data management application programming interface

(DMAPI) of the parallel file system [metadata node, col 30, lines 27-35, col 30, lines 55-60]

receiving a request submitted to the parallel file system by a user application on a source

node in the cluster to perform an operation on a file in one of the volumes of data storage [single

node is selected as metadata node for a file, col 30, lines 52-58]

sending a notification of a DM event to the session node responsive to the request [col 30,

lines 55-58]

obtaining a data management access right from the DMAPI by processing the event at the

session node [col 32, lines 5-40]

performing the operation on the file using the access right [col 32,lines 5-40]

Claim 3:

Schmuck discloses wherein initiating the data management application comprises

initiating a data migration application, so as to free storage space on at least one of the

volumes of data storage, and wherein receiving the request comprises generating an event

responsive to the request, and wherein obtaining the right at the session node comprises

associating a DM token with the right at the session node for use in invoking a DMAPR

function to be applied to the file and associating the token with the event, and wherein

performing the operation comprises migrating data at a plurality of the nodes simultaneously

by presenting the token in connection with the DMAPI function [col 31, line 60 through

column 32 line 40]

Claim 5:

Schmuck discloses wherein obtaining the data management access right comprises

acquiring a data management lock on the file, so as to restrict other data management and file

operations on the file while the lock is held [col 21, lines 10-30]

Claim 6:

Schmuck discloses wherein acquiring the data management lock comprises holding the lock over a sequence of multiple kernel calls in the parallel file system [col 32, lines 5-10]

Claim 7:

Schmuck discloses wherein the operation is a file operation, and wherein acquiring the data management lock comprises holding the lock for a single kernel call in the parallel file system [col 32, lines 5-10]

Claim 8:

Schmuck discloses wherein the file operation is pone of a plurality of file operations to be performed on the file, and wherein acquiring the data management lock comprises allowing the plurality of file operations to hold respective data management locks simultaneously without mutual conflict [col 30, lines 25-35]

Claim 9:

Schmuck discloses wherein acquiring the data management lock comprises acquiring an exclusive lock [col 30, lines 53-58]

Claim 10:

Schmuck discloses wherein acquiring the data management lock comprises acquiring a shared lock [locking a node to prevent stealing [col 34., lines 45-55]

Claim 11:

Schmuck discloses wherein acquiring the data management lock comprises selecting the

lock from a table of locks provided for both file operations and data management operations

[Table 6]

Claim 13:

Schmuck discloses wherein acquiring the data management lock comprises providing the

data management lock within a hierarchy of locks supported by the parallel file system [col

32, lines 52-57].

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Schmuck in view

of applicant's admitted prior art, as best examiner is able to ascertain.

Claim 12:

Schmuck discloses the essential elements of claims 1, 5, 11 and 12 as noted above but

does not disclose wherein performing the4 operation comprises calling a DMAPI function to

perform a data management operation, and wherein acquiring the data management lock

comprises acquiring, in a course of executing the DMAPI function, one of the locks provided

for the file operations for the duration of the DMAPI function, so as to enable calling the

DMAPI function without presenting a DM token. Applicant as admitted prior art discloses DMAPI functions can be invoked without presenting a DM token (DM_NO_TOKEN), in which case DM access rights are acquired only for the duration of the given DMAPI function. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Schmuck to include wherein performing the4 operation comprises calling a DMAPI function to perform a data management operation, and wherein acquiring the data management lock comprises acquiring, in a course of executing the DMAPI function, one of the locks provided for the file operations for the duration of the DMAPI function, so as to enable calling the DMAPI function without presenting a DM token based upon the disclosure by applicant as admitted prior art for the purpose of enabling read-only functions.

Response to Arguments

Applicant's arguments, filed July, 16, 2004, have been carefully considered and found persuasive but are now moot based on above new grounds of rejection.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Etienne P. LeRoux whose telephone number is (571) 272-4022. The examiner can normally be reached Monday through Friday between 8:00 am and 4:30 pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Safet
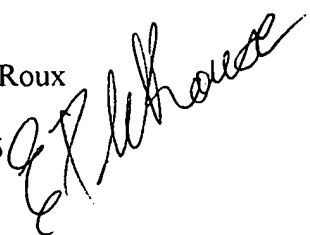
Metjahic can be reached on (571) 272-4023. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Etienne LeRoux

12/19/2005